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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,311	03/16/2001	Milton Silva-Craig	13036US01	2494

23446 7590 06/27/2005

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EXAMINER

GILLIGAN, CHRISTOPHER L

ART UNIT PAPER NUMBER

3626

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,311

Applicant(s)

SILVA-CRAIG ET AL.

Examiner

Luke Gilligan

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3626

Claims 1-50 have been examined.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 40 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 40 recites the phrase "said data center's archive" at lines 2-3. Although claim 38, from which claim 40 depends, recites a "data center," there is no recitation of a "data center archive." Therefore, there is insufficient antecedent basis for this limitation in the claim. For examination purposes, the Examiner will treat the limitation as "an archive of said data center."

4. Claim 42 recites the phrase "said medical image source" at line 1. Claim 38, from which claim 42 depends, does not recite "a medical image source." Therefore, there is insufficient antecedent basis for this limitation in the claim. For examination purposes, the Examiner will treat this claim as though it depends on claim 41 which does recite "a medical image source."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

Art Unit: 3626

6. Claims 1, 3-10, 12-18, 20-24, 26-30, 32-35, 37-39, and 41-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al., U.S. Patent No. 6,260,021.

7. As per claim 1, Wong teaches a medical information system, said system comprising: a medical information source, said medical information source providing medical information in a medical information format (see column 3, lines 31-36); a medical image source, said medical image source providing medical images in a medical image format (see column 3, lines 61-64); an interface unit receiving said medical information and translating said medical information into a medical image format-compatible format (see column 3, lines 42-46), receiving said medical image, associating said medical information in said medical image format-compatible format with said medical image, and transmitting said medical information in said medical image format-compatible format and said medical image (see column 4, lines 16-30, note that both medical images and associated medical report data are formatted into a uniform object-oriented structure); and a data center receiving said medical information in said medical image format-compatible format and said medical image in said medical image format and storing said medical information in said medical image format-compatible format and said medical image (see column 8, lines 53-64, it is noted that formatted medical image and associated information that is displayed on the client systems must at least be temporarily stored in memory).

8. As per claim 3, Wong teaches the system of claim 1 as described above. Wong further teaches said data center comprises a viewer for allowing access to medical images and medical information (see column 8, lines 53-64).

9. As per claim 4, Wong teaches the system of claim 1 as described above. Wong further teaches the medical image source comprises a picture archiving and communications system (see column 7, lines 29-37).

Art Unit: 3626

10. As per claim 5, Wong teaches the system of claim 1 as described above. Wong further teaches the medical information source comprises a hospital information system (see column 7, lines 1-6).

11. As per claim 6, Wong teaches the system of claim 1 as described above. Wong further teaches the medical information source comprises a radiology information system (see column 7, lines 59-60).

12. As per claim 7, Wong teaches the system of claim 1 as described above. Wong further teaches said data center comprises an application service provider (see column 12, lines 13-17).

13. As per claim 8, Wong teaches the system of claim 1 as described above. Wong further teaches said data center further comprises an external interface for allowing users to access medical images and medical information at said data center (see column 3, lines 7-14 and column 8, lines 57-61).

14. As per claim 9, Wong teaches the system of claim 1 as described above. Wong further teaches said medical information comprises radiology information (see column 3, lines 31-36, note that RI systems are radiology information systems).

15. As per claim 10, Wong teaches the system of claim 1 as described above. Wong further teaches a broker for translating said medical information format (see column 6, lines 18-22).

16. As per claim 12, Wong teaches the system of claim 1 as described above. Wong further teaches said data center comprises a web server for allowing access to medical images and medical information via at least one web browser (see column 12, lines 6-19).

17. As per claim 13, Wong teaches the system of claim 1 as described above. Wong further teaches a DICOM viewing workstation for allowing access to medical images and medical information (see column 11, lines 10-14).

Art Unit: 3626

18. As per claim 14, Wong teaches the system of claim 1 as described above. Wong further teaches said data center further stores links to said medical information (see column 13, lines 45-59).

19. As per claim 15, Wong teaches the system of claim 1 as described above. Wong further teaches said data center further stores links to said medical image (see column 13, lines 45-59).

20. As per claim 16, Wong teaches the system of claim 1 as described above. Wong further teaches said interface unit transmits a link representing the location of said medical information (see column 14, lines 1-6, the Examiner is interpreting the URL of the image server to be a form of representation of the location of medical information).

21. As per claim 17, Wong teaches the system of claim 1 as described above. Wong further teaches said interface unit transmits a link representing the location of said medical image (see column 14, lines 1-6).

22. As per claim 18, Wong teaches a centralized medical information system, said system comprising: an interface unit receiving medical information and translating said medical information into a medical image format-compatible format (see column 3, lines 42-46), receiving a medical image, associating said medical information in said medical image format-compatible format with said medical image, and transmitting said medical information in said medical image format-compatible format and said medical image (see column 4, lines 16-30, note that both medical images and associated medical report data are formatted into a uniform object-oriented structure); and a data center receiving said medical information in said medical image format-compatible format and said medical image in said medical image format and storing said medical information in said medical image format-compatible format and said medical image (see column 8, lines 53-64, it is noted that formatted medical image and

Art Unit: 3626

associated information that is displayed on the client systems must at least be temporarily stored in memory).

23. Claims 20, 21-24, and 26-28 recite substantially similar additional limitations to those already addressed in claims 3, 7-10, 12, and 16-17 and, as such, are rejected for similar reasons as given above.

24. Claims 29-30 and 32-34 contain substantially similar method limitations as those already addressed with respect to system claims 1-3, 7 and 9 and, as such, are rejected for similar reasons as given above.

25. As per claim 35, Wong teaches the method of claim 29 as described above. Wong further teaches said first format comprises HL7 format (see column 8, lines 6-14).

26. As per claim 37, Wong teaches the method of claim 29 as described above. Wong further teaches said second format comprises as standard text format (see column 12, lines 13-17, since displayed medical information can include "report information" it is assumed that this is displayed as text).

27. Claims 38-39 and 41-46 recite substantially similar method limitations to those already addressed in system claims 1, 3-6, and 12 and, as such, are rejected for similar reasons as given above.

28. As per claim 47, Wong teaches a method for accessing medical information and images, said method comprising: requesting an associated medical image and medical information for a remote data center (see column 14, lines 12-24); providing medical information from a medical information source to an interface unit (see column 14, lines 28-33); translating said medical information into reformatted medical information (see column 14, lines 49-52); associating said reformatted medical information with said medical image (see column 4, lines

Art Unit: 3626

16-21); and providing the associated reformatted medical information and medical image (see column 14, lines 53-58).

29. Claims 48-50 recite substantially similar additional method limitations to those already addressed in system claims 4-6 and, as such, are rejected for similar reasons as given above.

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 2, 19, 31, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al., U.S. Patent No. 6,260,021 in view of Rothschild et al., U.S. Patent No. 6,678,703.

32. As per claim 2, Wong teaches the system of claim 1 as described above. Wong does not explicitly teach that the datacenter comprises an archive for storing medical images and medical information. Rothschild teaches a data center that includes an archive for storing medical images and medical information (see column 18, lines 45-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this archive feature into the system of Wong. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of protecting against data loss by providing redundant storage at multiple locations (see column 17, line 66 – column 18, line 2 of Rothschild).

33. Claims 19, 31, and 40 recite substantially similar additional features to those already addressed in claim 2 and, as such, are rejected for similar reasons as given above.

Art Unit: 3626

34. Claims 11, 25, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al., U.S. Patent No. 6,260,021 in view of Anderson et al., U.S. Patent No. 6,078,925.

35. As per claim 11, Wong teaches the system of claim 10 as described above. Wong further teaches that the broker translates from HL7 format (see column 8, lines 6-14). Wong does not explicitly teach that the broker translates to SQL format. Anderson teaches Relational Extenders that store new data types in an SQL format (see column 3, lines 13-17). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Wong. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of enabling searching of complex data types (see column 2, lines 10-13 of Anderson) such as medical care data including medical imaging data (see column 1, lines 44-47 of Anderson).

36. Claims 25 and 36 recite substantially similar additional features to those already addressed in claim 11 and, as such, are rejected for similar reasons as given above.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Turek teaches a system for blending text with medical images.
- Jordan teaches a system for processing medical diagnostic images.
- Becker teaches a workflow system for medical imaging.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Gilligan whose telephone number is (571) 272-6770. The examiner can normally be reached on Monday-Friday 8am-5:30pm.

Art Unit: 3626

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/23/05


C. Luke Gilligan
Patent Examiner
Art Unit 3626